

RSI STANDARDS

Reactive Strength Index measures how much rebound an athlete produces for the time they spend on the ground. It is the fastest way to see elastic, spring-like quality, and the first number that moves when an athlete learns to use the floor instead of absorbing it.

$$\text{RSI} = \frac{\text{Flight Time}}{\text{Contact Time}}$$

Measured on the mat to 0.001 s · compare Plyomat to Plyomat

10/5 TEST

Ten straight-leg rebound hops. Your score is the average of the best five. The standard reactive assessment.

4/2 TEST

Four hops, best two count. A shorter dose for younger athletes and dense testing days.

STANDARDS · 10/5 & 4/2

LEVEL	MALE	FEMALE
WORLD CLASS	> 5.0	> 4.5
ELITE	4.5 – 5.0	3.75 – 4.5
ADVANCED	3.5 – 4.25	3.0 – 3.75
EFFICIENT	3.0 – 3.5	2.5 – 3.0
DEVELOPMENTAL	2.25 – 3.0	2.0 – 2.5
POOR	1.5 – 2.25	1.5 – 2.0

WHAT TRAINED ATHLETES ACTUALLY POST · 10/5 BEST SET

3.02

3.46

3.79

4.17

4.33

Distribution of per-athlete best 10/5 sets (average of best five hops) from 81 trained youth and high-school athletes in a structured development program, tested on Plyomat. A median trained athlete sits in Efficient; the top decile reaches the doorstep of Elite. Untrained athletes typically start a full level lower.

COACH'S READ

RAISE IT

RSI climbs when contact time drops without losing height. Program pogo series, drop jumps, and stiffness work before heavy eccentrics, the floor teaches faster than the bar.

WATCH THE FLOOR TIME

Trained athletes hold 140–185 ms contacts on the 10/5 (median 162 ms). If contact drifts past 200 ms, the score is coming from jump height, not reactivity.

RETEST, THEN TRUST IT

Retest every 4–6 weeks under the same protocol and warm-up. A 0.2–0.3 move in RSI is real progress; day-to-day wobble under 0.15 is noise.

